

# cleanup date

U.S. DEPARTMENT OF ENERGY/BROOKHAVEN NATIONAL LABORATORY/ASSOCIATED UNIVERSITIES INC.

THE OFFICE OF ENVIRONMENTAL RESTORATION — VOL.1/NO.2/SPRING 1996

## 'Comment period' extensions facilitate community inquiries

The granting of two extensions to the Operable Unit I Groundwater/Removal Action V public comment period allowed a substantial increase in the number of comments and questions directed to the U.S. Department of Energy about the environmental investigation underway along Brookhaven National Laboratory's southern boundary.

The original public comment period was scheduled to conclude on February 2, but it was extended twice and closed on March 18. As of that date, no further extension requests were received by the Department of Energy (DOE) and the period closed.

Citizens, especially those from the North Shirley/East Yaphank community, just south of the Lab where hookups to public water are set to begin, wanted more information. They wanted to know more about the Office of Environmental Restoration investigation that found the potential for private wells to draw contaminants that might have come from BNL. People also requested more details about proposed cleanup activities and processes.

The DOE's response to these public comments and questions, whether they are from the January 16 public meeting or from letters received before or after that meeting, is called the

"Responsiveness Summary." Although an exact date has not been set for this report's availability to the public—it must first be reviewed by the Interagency Agreement members who govern the cleanup at BNL—it will probably be available to the public by mid-May.

The major concerns expressed by the public and to be addressed in the Responsiveness Summary include: the extent of the North Shirley/East Yaphank hookup area; air emissions from the air stripper (part of the "pump-and-treat" remediation system); the process of natural attenuation; and the data gaps that are still being filled. ■

### Message from the manager

## Brookhaven's first Record of Decision

by Bill Gunther,  
Manager, Office of Environmental Restoration

The Superfund process is a detailed, sometimes lengthy process through which cleanup generally comes one of two ways.

For contamination that could pose a threat to public health and/or the environment, a "removal action" is undertaken. This is a "fast track" cleanup where the contamination is dealt with as quickly as feasible. The goal is to eliminate the potential threat to public health and the environment. To date, Brookhaven National Laboratory has completed the capping of a landfill and the removal of above- and underground storage tanks using this "fast track" approach.

When contamination does not pose a threat to public health and the environment, a longer, more detailed investigation is conducted before cleanup decisions are made. This process culminates with a "record of decision."

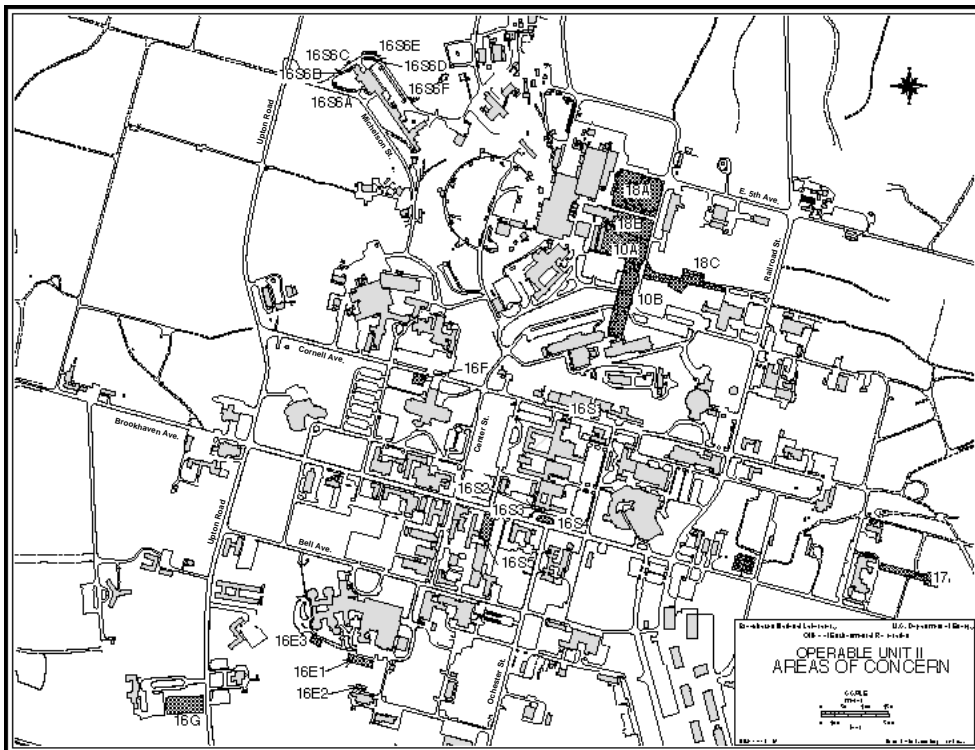
(For a diagram explanation of the cleanup process, see "The Superfund Process" pullout in this issue.)

This ROD, as it is called, signifies that the parties that oversee the cleanup at BNL (U.S. Department of Energy, U.S. Environmental Protection Agency, New York State Department of Environmental Conservation) have agreed on two major issues: The

See story, page 3.

## inside

The Superfund cleanup process involves public and private individuals and agencies, federal and state procedures and laws, and a lot of time. Inside this issue of **cleanup date**, look for the four-page pull-out section. It diagrams the Superfund process and provides a directory of information and hotline telephone numbers. Keep the section as your guide to the cleanup at Brookhaven National Laboratory.



*This map identifies the areas of concern in Operable Unit II/VII. Detailed information is now available in public repositories.*

This "RI/RA report" is scheduled to be submitted by the Office of Environmental Restoration to the members of the Interagency Agreement (IAG) early this fall. The IAG members (U.S. Department of Energy, U.S. Environmental Protection Agency, and NYS Department of Environmental Conservation) have a maximum of 30 days to review and comment on the draft, but extensions can be requested. The final report will probably be available for public comment in the spring of 1997. A public notice will announce its availability.

### The Areas of Concern

Four "areas of concern" (AOCs) have been identified and investigated

## Investigation progressing in Laboratory's central area

The Office of Environmental Restoration's initial inquiry into the type and quantity of contamination in the developed central area of Brookhaven National Laboratory is complete, and the "work plan" for the upcoming remedial investigation is available to the public.

The report, officially known as the "Operable Unit II/VII Remedial Investigation Work Plan," is in the Lab's public repositories. (For repository locations, see page 4 of the pull-out section, "The Superfund Process.") The report provides the basis for characterizing the degree of contamination in the area's soil.

Low levels of chemical and radiological contamination have been found in the soil in this operable unit, which is a developed area with buildings, roads and parking lots. Because of the relatively low levels of contamination that have been found, BNL's health professionals do not consider this a hazard to the health of Lab employees or the public for current uses.

This remedial investigation (RI) work plan is the first in a series of studies required by New York State and federal law before appropriate cleanup methods can be proposed, reviewed and selected. The work plan delineates how the remedial investigation will be conducted, while the subsequent remedial investigation/risk assessment (RI/RA) report describes in detail the type and quantity of environmental contaminants found in the operable unit. These findings are the basis for making decisions regarding contaminant cleanup.

The risk assessment portion of the draft report will consider the level of contamination in the operable unit and its potential to affect public health and the environment.

in Operable Unit II/VII:

**Waste Concentration Facility (AOC 10):** The facility is designed to reduce the volume of liquid low-level radioactive waste material produced by scientific experiments at the Lab. Spills and leaks from the storage tanks at the facility have been reported and three of the above-ground storage tanks (referred to as D-tanks) have been dismantled and shipped to Hanford, Washington for disposal (Removal Action I, 1995).


The AOC 10 investigation centers on assessing radiological and chemical soil contamination from the reported spills and leaks. Six underground storage tanks are included in this area and are slated to be removed.

**Landscaping Soils (AOC 16):** This area of concern (and the soils associated with it) is actually several small sites distributed within the central portion of the Lab. These isolated spots are not thought to have been radiologically contaminated by Lab activities in the area of concern. Rather, the soils were probably contaminated in the mid to late 1960s by accidental spills near the Hazardous Waste Management Facility. Then, the soils were mistakenly removed from near that facility and used as landscaping fill at several locations in Operable Unit II.

**Low-Mass Criticality Facility Area (AOC 17):** This is the site of a now-demolished testing facility used from 1955 to 1967 for experiments using small amounts of radiological material. Once decontaminated and decommissioned, the facility stood empty until 1983, when it was used for one year to store 20 drums of ethylene dibromide. No accidents or spills were documented during either period of use. Although a 1983 aerial radiological survey detected contamination in the area, a recent field investigation indicates no radiological contamination above background detection levels.

*See story, page 4.*

# The Superfund Process

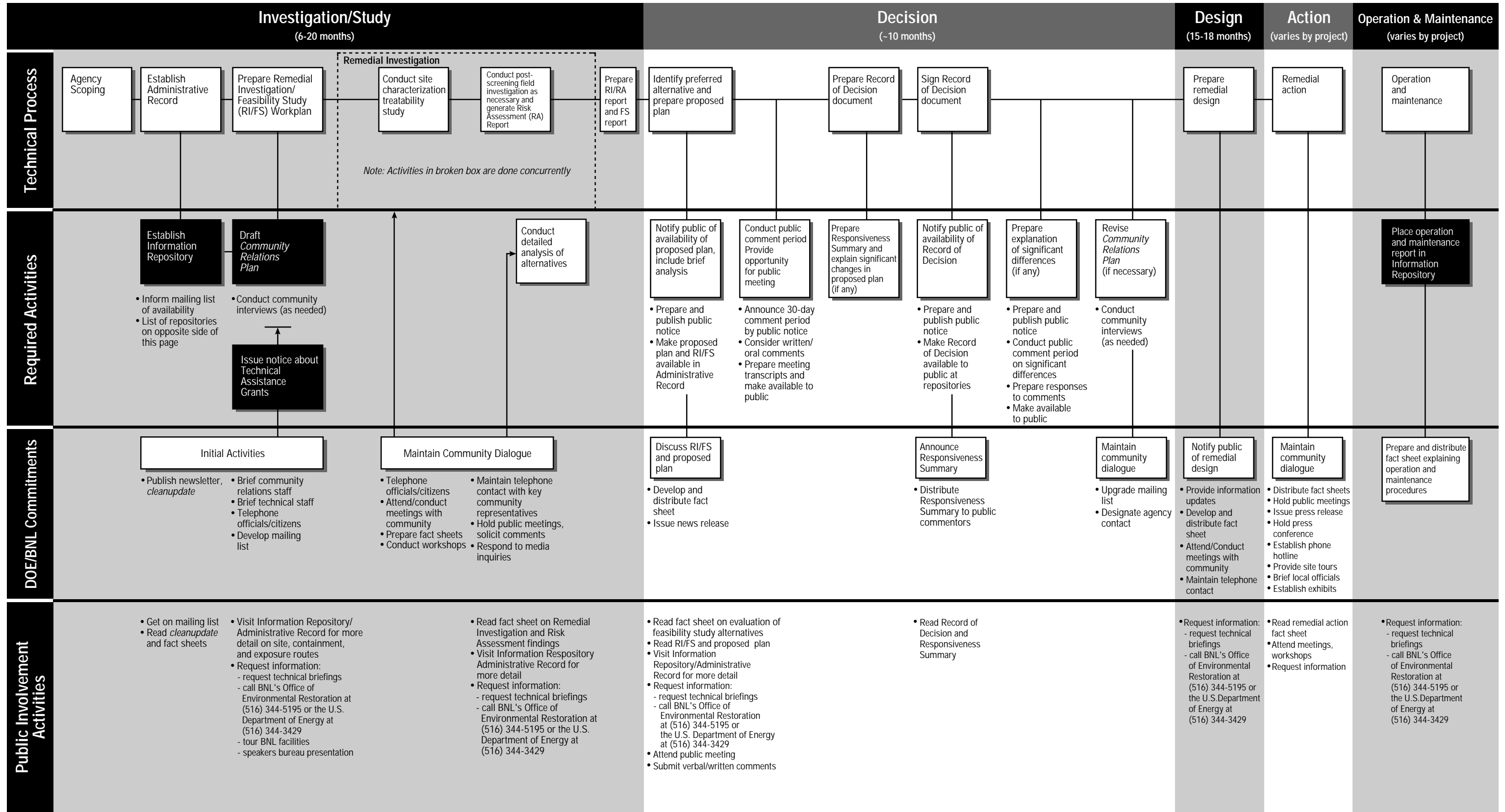


## This section:

- Diagrams the Superfund cleanup process and the various roles played by the community, Brookhaven National Laboratory, the U.S. Department of Energy, and the cleanup oversight agencies.
- Provides a list of addresses and telephone numbers for local, state and federal officials.
- Gives you a guide to keep.

In the next *cleanupupdate*, look for another pullout chart diagramming where the Lab's cleanup started, where it is now, and where it is going.

# The Superfund Process



Contacts —  
For more information about the  
Superfund cleanup at Brookhaven  
National Laboratory, call:

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Dept. of Environmental Conservation

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518-457-3976

Joshua Epstein  
Citizen Participation Specialist  
516-444-0249

Contacts —  
For more information about public  
and environmental health, call:

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U.S. Agency for Toxic Substances  
and Disease Registry  
(404) 639-6000

New York State  
Department of Health  
Center for Environmental Health  
(800) 458-1158, Extension 402,  
or (518) 458-6402

Dept. of Environmental Conservation  
(800) 342-9296

Suffolk County  
Department of Health Services  
Division of Environmental Health Services  
(516) 853-3081

Division of Public Health  
(516) 853-3057

Libraries —  
Reports from BNL's Office of  
Environmental Restoration  
are available at:

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Longwood Public Library  
800 Middle Country Road  
Middle Island, New York  
516-924-6400

Mastic-Moriches-Shirley Library  
301 William Floyd Parkway  
Shirley, New York  
516-399-1511

BNL Research Library  
Building 477A  
Brookhaven Avenue  
Upton, New York  
516-344-3483

U.S. EPA, Region II  
Administrative Records Room  
290 Broadway  
New York, New York  
212-637-4296

Federal Information  
and Hotline Telephone Numbers

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*U.S. Department of Energy*

Environmental Information Center  
(800) 736-3282

Public Information Center  
(201) 843-7466

Inspector General Hotline  
(800) 541-1625

National Environmental Policy Act  
Information Hotline  
(800) 626-2756

Nuclear Safety Hotline  
(800) 626-6376

*U.S. Environmental Protection Agency*

Public Information Center  
(202) 260-2080  
(202) 260-7751

ORD Research Information  
(513) 569-7562

National Center for Environmental  
Publications Informations  
(513) 569-7980

RCRA, Superfund and  
Underground Storage Tanks  
(800) 424-9346

Hazardous Waste Ombudsman  
(800) 262-7937

Ground Water  
(202) 260-7786

Drinking Water  
(800) 426-4791

Pesticides  
(800) 858-7378

Toxic Substances & Asbestos Information  
(202) 554-1404

Pollution Prevention Information  
Exchange System  
(703) 821-4800

Pollution Prevention Clearinghouse  
(202) 260-1023

Environmental Justice  
(800) 962-6215

Emergency Planning &  
Community Right-to-Know  
(800) 535-0202

Environmental Education  
(202) 260-4962

Air Control Technology Assistance Center  
(919) 541-0800

Air Risk Hotline  
(919) 541-0888

Solid Waste Information Clearinghouse  
(800) 677-9424

Transporting Hazardous Materials  
(800) 752-6367

Waste Water  
(800) 624-8301

Wetlands  
(800) 832-7828

investigation is complete and the selected cleanup method is appropriate.

On March 25, the ROD for Operable Unit IV, the cleanup project around the Central Steam Facility, was signed by those three key parties. It is the first record of decision reached at BNL, and is a milestone for the Lab. Perhaps

more importantly, though, the signing of this document represents a milestone for the community. The cleanup at the Lab is moving forward!

In the next *cleanup*, we will go into detail about the OU IV remediation. The ROD document has been available in public repositories since April 15. ■

## hookupdate

**An update from the U.S. Department of Energy:**

The U.S. Department of Energy has completed its five planned workshops to help property owners in North Shirley/East Yaphank answer questions and fill out applications regarding hookup to the Suffolk County Water Authority public water supply.

But just over half of the approximately 450 homes eligible for hookup at government expense in North Shirley have actually applied for hookup. That has officials concerned.

"Without an application on file, a property owner will not be able to have their home connected to the Suffolk County Water Authority lines," said Rich Freeman, DOE's project manager.

As of March 25, water main piping had been delivered to the streets in the northeast section of the designated hookup, where the first mains are to be installed.

Despite several blanket mailings to the neighborhood, newspaper advertisements, and requests to local civic associations to announce the need to apply for hookup, only about 250 applications had been received by the end of March. Energy and Water Authority officials are working together to determine how they can be certain everyone who is eligible for hook up has the information and opportunity they need to apply for hookup. However, an application deadline may have to be implemented.

Mr. Freeman said that for the Department of Energy and the

Suffolk County Water Authority, the goal is to complete the project by September 30, 1996.

### ***Extension of Hookups to Sunrise Highway***

Meanwhile, Energy officials announced on March 19 that the hookup of homes to Water Authority lines would be extended beyond the North Shirley/East Yaphank neighborhood bounded by Carleton and Colin drives on the north, Flower

Hill Drive on the south, River Road on the west, and Sleepy Hollow Drive on the east. Hookup in this area is considered to be a precautionary measure to protect the neighborhood from the possibility that its wells might in the future draw groundwater containing contamination from Brookhaven National Laboratory.

However, Energy officials decided to heed the concerns of elected officials and Shirley residents and extend the hookup area to include more homes. These homes are in the area bounded by Flower Hill Drive on the north, Sunrise Highway on the south, River Road on the west, and Cranford Boulevard on the east. This area surrounds Brookhaven Airport.

"Our indications are that residential wells at these additional homes are not affected by contamination from Brookhaven," said Carson Nealy, manager of the Department of Energy's Brookhaven office. "But we are taking this step to remove uncertainty that residents might have about their wells."

Energy and Water Authority officials are working out the contractual and logistic details for the work in the extended area.

Applications for this extended area will be mailed to residents at the end of April.

The entire project should be complete by September 30 of this year.

If you have questions about these hookups and the application process, Mr. Freeman can be reached at (516)-344-2093.



*Water main lines along Stratler Drive, west of Sleepy Hollow Drive.*



## in the next cleanupdate . . .

- The WorldWideWeb offers anyone with a computer and a modem the chance to tap an enormous resource of information about Superfund and other health and environmental laws, Brookhaven National Laboratory, the U.S. Department of Energy, the U.S. Environmental Protection Agency, the New York State Department of Environmental Conservation, and other public and private organizations and institutions.

In the next issue of *cleanupdate*, look for an overview of where and how to start looking for this information.

- Also look for the second of two charts describing the Superfund process. The first chart, which you will find in this issue, covers the Superfund process in general. The second chart, in the next *cleanupdate*, will provide a timeline of Superfund projects completed, underway and planned at BNL. Each chart is part of a pull-out section that includes an extensive list of telephone numbers for regulatory, health and environmental information centers and hotlines across the country.

## New phase

(continued from page 2)

### ***Alternating Gradient Synchrotron Storage Yards (AOC 18):***

These three yards are used for storing materials used in AGS experiments. Two yards store steel and/or lead bricks contaminated by radioactivity. The other is for non-contaminated steel. The work plan is designed to see if the storage of these materials has contaminated the soil.

### **The Remedial Investigation Process**

The complete remedial investigation process includes four steps and is designed to accurately determine the extent of contamination in a given area. The steps are:

- 1) The RI Work Plan, detailing the methodology of the investigation, is submitted by BNL's Office of Environmental Restoration to the U.S. Department of Energy, the U.S. Environmental Protection Agency and the

New York State Department of Environmental Conservation. These agencies are parties to the Interagency Agreement (IAG) which governs the cleanup at BNL. The IAG members review and approve the work plan, with or without changes. This step is complete.

- 2) Under BNL supervision, environmental consultants perform the RI Field Investigation, which includes radiation walk-over survey techniques and surface/subsurface soil sampling. This step, which can take from several months to over a year, is also complete.

- 3) Sample analysis is performed by the contractor, under BNL supervision, following the methodology and techniques defined in the work plan. This process is underway and should take about three months.

- 4) The RI/RA Report is submitted to the IAG members, who review and critique the report before approving it, with or without changes. This process has not yet begun. ■